

EFSA ADVISORY GROUP ON DATA

Ákos Józwiak
chair of AGoD

University of Veterinary Medicine
Budapest, Hungary



FOOD AND DATA



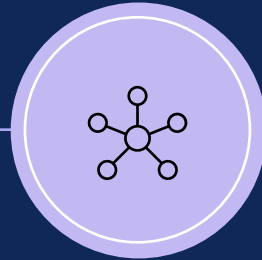
Complexity

Increasing volume & complexity of the food chain



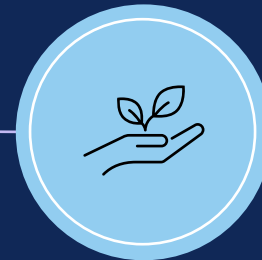
Data

Growth of the amount of data available for analysis



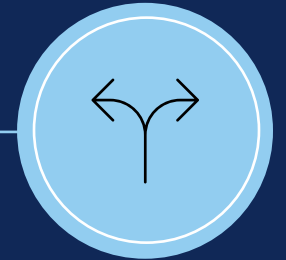
Science

Advances in computational and complexity sciences, and AI



Values

Increasing discussions on societal values, costs, ethics



Decisions

Better evidence-based decision making?

Data



**Data
collection**

**Data
modelling**

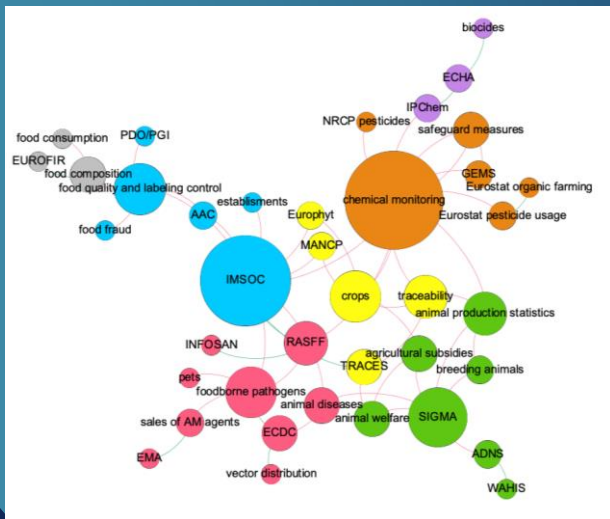
Business
Authorities
Academia
Citizens

**Architecture &
Infrastructure**

**Data
analysis**

People





HOW IT STARTED

EFSA Advisory Forum **Data Collection and Data Modelling Task Force**

Kick-off: September 2018

8 meetings

Report in September 2020

TECHNICAL REPORT



APPROVED: 3 September 2020

doi:10.2903/sp.efsa.2020.EN-1901

Report of the Advisory Forum Task Force on Data Collection and Data Modelling

European Food Safety Authority (EFSA),
Jesus Alvarez-Pinera¹, Flemming Bager, Milo Bystrický, Susanne Dittmann Rasmussen,
David Foster, Klemens Fuchs, Mary Gilsonan, Danica Grahek-Ogden, Ákos Jozwiak,
Sanaa Moez, Monica Neagu, Eileen O'Dea, Alessandra Perrella, Jane Richardson, Eva
Scharfenberg, Darja Sokolic, Martina Stack, Katie Vermeersch, Koen Wienk



ADVISORY GROUP ON DATA

Started in April 2021
28 meetings so far...

AGOD

- Act as a **governance body** providing recommendations
- Act as a **think tank** providing input on project idea generation
- Act as a **program steering committee** for data related projects
- Act as a **consulting body** on Focal Point tailor-made activities proposals in area of data
- Act as a **hub** providing access to knowledge, expertise, competencies and staff in Member States
- Provide **strategic input** on and oversight of alignment of EFSA's data and AI roadmap

PARTNERSHIPS



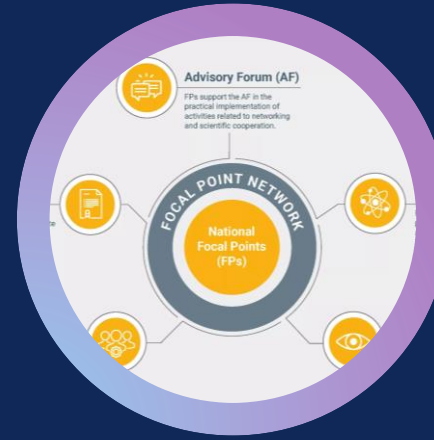
Advisory Forum

Supporting AF at strategic level in data related matters



Data Networks

Interaction with data networks in Subgroups to collect expertise and needs from MS



Focal Points

Collaboration in identifying partners and implementing project ideas



EFSA and EC

Strategic input on and oversight of alignment of data related activities with EFSA Data Roadmap

UPDATES

- New **Terms of Reference** in 2024: setting new structure
- **Roadmap** for 2024-27: planned objectives and activities
- Data-related **FP Tailor-made activities**: generating project ideas, acting as a consulting body and as a program steering committee
- **Agenda** for 2025
- Updated **website**: <https://www.efsa.europa.eu/en/advisory-group-on-data>

HOW DO WE WORK?

Data Governance

- Governance bodies and roles
- Collaborative decision-making mechanisms

Data Management

- Data Quality
- Data Modelling and Terminologies
- Data Analysis and visualization

Tools & Eco-systems

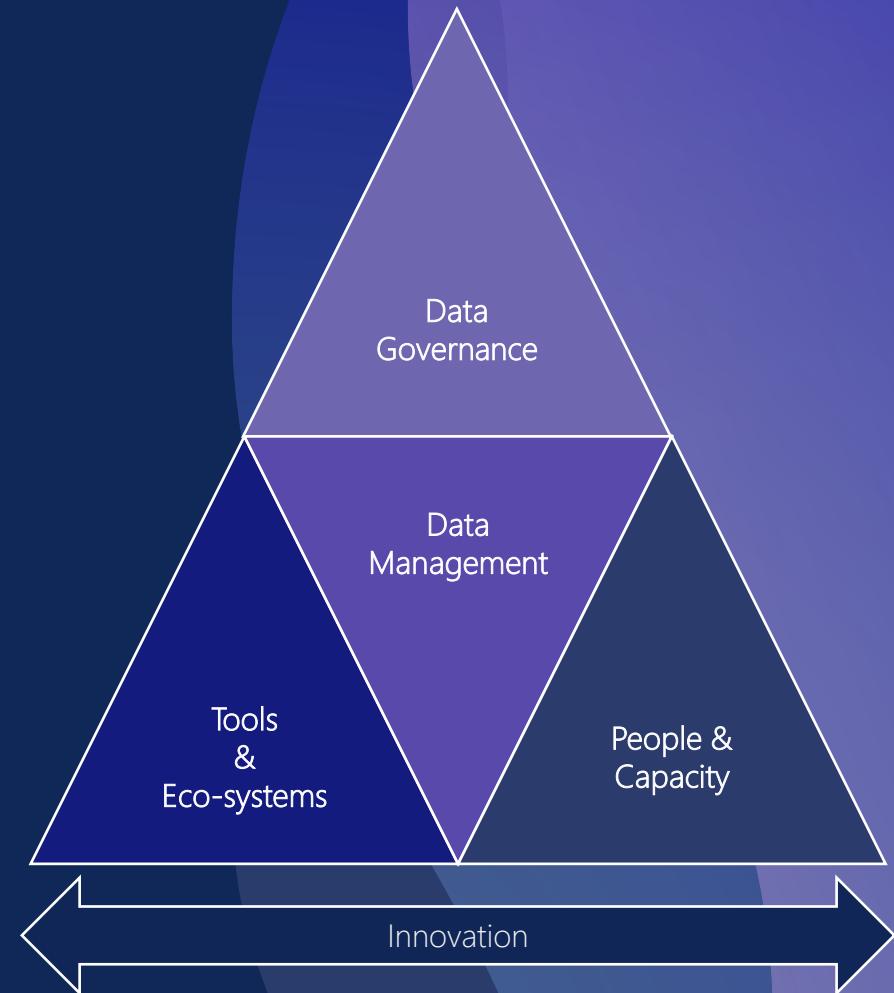
- Digital Platforms and eco-systems
- Developing and sharing tools

People & Capacity

- Data Literacy
- Data Capacity preparedness

Innovation

- Innovative data analytics
- New data streams
- AI



ROADMAP: DATA GOVERNANCE

2024 Q3-4	2025 Q1-2	2025 Q3-4	2026 Q1-2	2026 Q3-4	2027 Q1-2	2027 Q3-4
1. New way of working – Clusters subgroups						
2. Data flow mapping in MSs (TIMELINE: Q3 24 until end year 2024)						
3. Inter-agency expert group on data						
4. AGoD meeting(s) with SCOPAFF						
5. Connections with other data-related initiatives						
6. Relationship diagram Food Safety entities						
7. Data governance roles at MS level- analysis and recommendations						



ROADMAP: DATA MANAGEMENT

2024 Q3-4	2025 Q1-2	2025 Q3-4	2026 Q1-2	2026 Q3-4	2027 Q1-2	2027 Q3-4
		1. Development of data quality monitoring system				
		2. Integration of Food Consumption recommendations in AGoD				
		3. Integration and standardisation of controlled terminology across the European Food System				
		4. Development of harmonised ontologies through dedicated working groups				
			5. Metadata governance			
		6. Towards single 'European food safety data model'				
		7. Defining strategic models and stakeholders				



ROADMAP: TOOLS AND ECOSYSTEM

2024 Q3-4	2025 Q1-2	2025 Q3-4	2026 Q1-2	2026 Q3-4				
1. Building of a Business rules engine								
2. Data exchange, automation, analysis needs and requirements between MSs and EFSA								
3. Data mapping (and transformation) needs and requirements from MSs to EFSA models								
4. Towards Data Capture in Foodex2								
	5. Investigate the needs of public destination or a central platform for cooperation and exchange between MSs and EFSA							
	6. Analyse and present existing best practices for open/restricted data publication and retrieval at MSs and EFSA							
7. Define "event driven approach" for system users in MS from consumer and deliverers perspective, collect information, expectation, real needs								



ROADMAP: PEOPLE AND CAPACITY

2024 Q3-4	2025 Q1-2	2025 Q3-4	2026 Q1-2	2026 Q3-4	2027 Q1-2	2027 Q3-4	
1. Reference profiles and minimal capacity / capability needs							
		2. Develop good practice guidelines for visualisation					
		3. Foster trainings at EU and MS level					
			4. Link to EU-FORA				
					5. Community of practice		
		6. Annual food safety data science conference					



ROADMAP: INNOVATION

2024 Q3-4	2025 Q1-2	2025 Q3-4	2026 Q1-2	2026 Q3-4	2027 Q1-2	2027 Q3-4
1. AI state of play standing agenda item						
2. White Paper “Using AI in food safety regulatory science”						
			3. Hackathon - combining EFSA reporting data and ‘unusual’ data sources			
	4. Promote and launch an AI lighthouse project					
		5. Use-case for traceability data in rapid risk assessment				



AG ON DATA: MEETINGS IN 2025

22 January online	5 March Poland	28 April online	17 June Parma	9 Sept online	5 Nov online	2 Dec Denmark
Subgroup check-in Progress TMT	Subgroup check-in Progress TMT	Subgroup check-in Progress TMT	Subgroup check-in Progress TMT	Subgroup check-in Progress TMT	Subgroup check-in Progress TMT	Subgroup check-in Progress TMT
AI: EFSA use cases	AI: AI Act	AI:	AI:	AI:	AI:	AI:
EFSA/BfR traceability projects	Outcomes of data flow mapping in MS	Set up inter-agency expert group on data	Revision of FP Tailor Made proposals	Update on EC data initiatives	Annual Report	Roadmap Checkpoint 2
What are Outputs of SGs and AGoD	Common European Data Model - discussion	Develop connections with other data-related initiatives	Roadmap Checkpoint 1 (conference in 2026?)	MS presentations on national initiatives	Develop a relationship diagram for Food Safety entities	Interagency presentation
EBTC presentation			Interagency presentation	European common data platform for Chemicals	Interagency presentation	



OUTLOOK: WHAT WE NEED TO DO

- Invest in data generation
- Build ontologies
- Share tools, standards, data, models
- Use open data standards
- Educate
- Manage changes
- Explore 'lighthouse' ideas/projects for AI
- Build networks and partnerships



Klemens FUCHS (AT)

Katharina STARK (CH)

Eva SCHARFENBERG (DE)

Dorte Lau BAGGESEN (DK)

Martina STACK (EI)

Mikko TUOMINEN (FI)

Klervi LEURAUD (FR)

Drazen KNEZEVIC (HR)

Ákos JÓZWIAK (HU)

Michele DE MARTINO (IT)

Koen WIENK (NL)

Danica GRAHEK-OGDEN (NO)

Filipa DE VASCONCELOS MELO (PT)

David FOSTER (SE)

Fabrizio ABBINANTE (EFSA)

Vittoria FLAMINI (EFSA)

Andrea MALDONADO (EFSA)

Maria CORREIA (EFSA)

Nina GEORGIEVA (EC)

Giorgos GEORGIANNAKIS (EC)

Rolanas KLIUCINSKAS (EC)

Peter BOKOR (EC)

THANK YOU

Ákos Józwiak

jozwiak.akos@univet.hu

LinkedIn: akosbernardjozwiak